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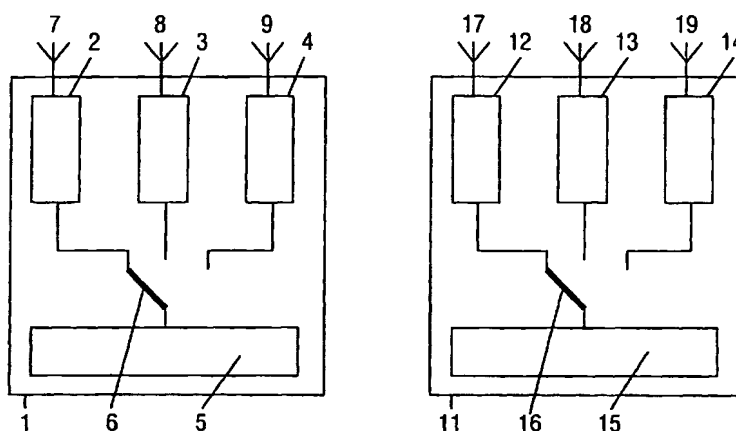
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(54) Title: TELECOMMUNICATION SYSTEM WITH SWITCHED CHAINS FOR UNCORRELATING CORRELATED NOISE



(57) **Abstract:** Telecommunication systems comprising transmitting units (1) and receiving units (11), with units (1 resp. 11) comprising parallel chains (2-4 resp. 12-14) coupled to processing parts (5 resp. 15), have enhanced data rates / channel capacities, under the assumption that the noise in the chains (2-4 resp. 12-14) is uncorrelated. Correlated noise from external noise sources decreases said rates / capacities. By coupling said chains (2-4 resp. 12-14) to said processing parts (5 resp. 15) via switches (6 resp. 16) for uncorrelating correlated noise in said chains (2-4 resp. 12-14), any correlated noise present in chains (2-4 resp. 12-14) is made uncorrelated. Said switch (30,50,70) (over/sub)samples chain signals, and is further coupled to said processing part (32,52,72) for controlling purposes to switch randomly or programmably, with said processing part (32,52,72) and said switch (30,50,70) operating synchronically. Said switch (30,50,70) comprises a (de)multiplexer, with a chain comprising at least an antenna (21,22,41,42,61,62) and possibly an amplifier (25,26,43,44) and a mixer (27,28) coupled via said switch (30,50,70) to said processing part (32,52,72) comprising at least a filter (37,57,77), a converter (38,58,78) and a processor (39,59,79) and possibly said mixer (56,76) and said amplifier (75).